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The Importance to Indopacific Botany of Baron Dumont de Courset's *Botaniste Cultivateur*

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Abstract

An examination of the second edition of Dumont de Courset's *Botaniste Cultivateur* completes the listings of new taxa in the *Australian Plant Name Index* and not yet in *Index kewensis*, where most are already found. Besides correction of the authority of the Chinese *Caragana pygmaea* (Leguminosae) to '(L.) Dum. Cours.' (and the North African *Genista ferox* to '(Poir.) Dum. Cours.'), and restoration of the Malesian *Pipturus asper* Wedd. (Urticaceae, lately referred to *P. arborescens* C. B. Robinson), and the superseding of the Himalayan *Rubus fragarioides* Bertol. (Rosaceae, non (Michaux) Dum. Cours.) by *R. franchetianus* Lévl., *Dillenia crenata* (A.C. Sm.) Hoogl. (Dilleniaceae, non (Andr.) Dum. Cours.) of the Solomon Islands is here renamed *Dillenia crenatifolia* Hoogl. ex Mabb., nom. nov..

Introduction

In early nineteenth-century Europe, there was, following that for Cape plants, a vogue for Australian ones, fuelled by contemporary British voyages, particularly that of Flinders on the *Investigator* (1801–5), and also those of the French, notably that of Baudin (1754–1803). Both also made collections in present-day Indonesia. The French, particularly those collecting for Josephine Bonaparte, were as quick as the British to get the new plants into cultivation. With improved glasshouses and heating systems it was possible to grow successfully more plants from the tropics, including, for example, *Josephinia imperiatricis* Vent. (Pedaliaceae; see Heine, 1967), named after Josephine and figured by Redouté in Ventenat's *Jardin de la Malmaison* (1804).

On the British side, most of these early introductions were incorporated in the second edition of *Hortus kewensis* (1811–1813), attributed to W.T. Aiton but partly written and edited by no less than Robert Brown (1773–1858), who had been naturalist on the voyage of the *Investigator*. Like the first edition of *Hortus kewensis*, the second one was arranged according to the sexual system of Linnaeus, which, paradoxically,

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Brown himself has much of the credit for ousting when re-introducing the Natural System of classification. This was in his *Flora Novae Hollandiae et Insula Van Diemen* (1810), the first, though incomplete, Flora of Australia, and a book in which many common Malesian plants were first described. Brown was effectively carrying the system of de Jussieu to British readers. Not surprisingly, the French equivalent of *Hortus kewensis*, Baron Georges Louis Marie Dumont de Courset's *Botaniste Cultivateur* (ed. 1, 5 vols, 1802–5 – for sale in Paris, London and Haarlem, with a later Leipzig edition in German) and ed. 2 (1811–4) almost exactly contemporaneous with the second edition of *Hortus kewensis,* was arranged along Jussieuian lines. That there is so little concordance between these two compendia may be explained by their being written in isolation due to the Napoleonic Wars.

Dumont de Courset (1764 – 1824) was born at the château de Courset near Boulogne in northern France (Lair, 1814) and was destined for a military career, but, whilst serving as a cavalry captain, was posted to the Pyrenees, where the flora so captivated him that he turned to botany and agriculture. Author of a number of works on agronomy, he set about creating a private botanic garden at Courset, where, by 1814, he had some 3600 exotic perennial species in cultivation, extensive greenhouses complete with the latest Australian plants as well as notable collections of Cape heaths and pelargoniums. Widely respected for his skill and breadth of knowledge, he was referred to as "ce nouveau Theophraste". He died at Courset.

His *Botaniste Cultivateur* was largely based on personal knowledge of the living plants and the first six volumes of his second edition, which appeared "vers la fin de 1811", covers some 8700 species referred to 1400 genera. On top of this, a supplementary seventh volume was issued in 1814. Although *Hortus kewensis* dealt only with plants cultivated in the London area, even the first edition of *Botaniste Cultivateur* claimed to cover all plants in England as well as France, while the second edition had in addition those of Italy and Austria (presumably in the old broad sense and therefore covering many other present-day central European countries too).

Australasia

The second edition deals with 520 plants from Australia alone (see vol. 7: 361) and contains hundreds of novelties from all over the world. Many binomials published in the book are today's accepted names of ornamental and other economic plants, tropical as well as temperate, grown worldwide.

Strangely, although the new names in the early volumes of the book were safely caught up in *Index kewensis*, many of those in the later ones – some of them first published in the first edition – are not, though names in *Eucalyptus* (vol. 7), for example, and those for many other plants (including many based on sterile material), are. Some of the missing are listed in Mabberley (1990, cf. also other neglected French work, notably that of Chazelles, discussed in Mabberley, 1991), and some, referring to the Pacific, are picked up in the synonymy of *Araucaria* (*Abies colombaria*, *Pinus colombaria*) by Green (1994 : 543).

Many others are in the *Australian Plant Name Index* (1991) with a suitable note, *"not in Index Kewensis"*. Some of these lead to ramifications beyond Australia, e.g. *Dillenia crenata* (Andr.) Dum. Cours., i.e. *Hibbertia grossulariifolia* (Salisb.) Salisb. (Dilleniaceae), which according to the catalogue appended to vol. 7 was being grown at Courset in 1814. The name is an earlier homonym of *D. crenata* (A.C. Sm.) Hoogl., a therefore illegitimate name for a tree from the Solomon Is. It is a pleasure to carry out the wish of my late friend, Ruurd Hoogland (1922–1994), monographer of the genus *Dillenia* and avid bibliographer, who had inadvertently created the superfluous homonym and, as is apparent from an annotated sheet at L, later realised his error:

Dillenia crenatifolia Hoogl. ex Mabb., **nom. nov**. – Dilleniaceae.
Wormia crenata A.C. Sm. in J. Arn. Arb. 22: 498 (1941). - *Dillenia crenata* (A.C. Sm.) Hoogl., Blumea 7: 42 (1952), *nom. illegit., non D. crenata* (Andr.) Dum. Cours., Bot. Cult., ed. 2, 7: 251 (1814) = *Hibbertia grossulariifolia* (Salisb.) Salisb. (Dilleniaceae).
Type: Solomon Is., Santa Isabel., Tatamba, 4 Jan. 1933, *Brass 3418* (A, holo-, n.v.; BM !, K !, L !).
Distribution: Solomon Islands.

It is not only Dumont de Courset's Pacific plant-names that have been omitted from *Index kewensis* but also those of many of plants from other parts of the world, often the tropics. Those for Indomalesia so far not picked up, plus, for completeness, those based on plants from the rest of the world, are given in the Appendix and an attempt is made to dispose of them there.

N.B. Several of Dumont de Courset's new names were also published at about the same time in the first part (23 Oct 1811) of Poiret's supplement vol. 2 to Lamarck's *Encyclopédie Méthodique*, though according to Lair (1814), Dumont de Courset's book did not appear until late in the year, so perhaps followed Poiret: e.g. *Caragana jubata* (Pallas) Poir. and *Comocladia brasiliastrum* Poir. As Dumont's herbarium is lost, those of his new species

described from sterile plants are not considered below, despite many such being already in *Index kewensis* and/or *Australian Plant Name Index.*

Indomalesia

The only nomenclatural consequences are for Indopacific plants, though two new combinations, in *Caragana* and *Genista* in current use, must correctly be attributed to Dumont de Courset. The only adjustments necessitated by setting the record straight in bringing all of Dumont de Courset's second edition into line with that followed for Australian plants in the *Australian Plant Name Index* are the restoration of a name in *Pipturus* (Urticaceae) and resurrection of a name (also inexplicably not yet in *Index kewensis*) for a Himalayan *Rubus* (Rosaceae). A fortunate outcome is that both of the correct 'new' names have extant holotype specimens, unlike one, at least, of those they replace:

1. Pipturus asper Wedd. in Ann. Sci. Nat. 4, 1: 197 (1854). Type: Philippines, *Cuming 724* (P ['Manille'], holo!; BM!, E!, G!, K!, L!, OXF!, iso) - Urticaceae.

Urtica arborescens Link, Enum. Hort. Berol. 2: 386 (1822), *nom. illegit.*, non Dum. Cours., Bot. Cult. 3 : 689 (1802) & ed. 2, 6: 370 (1811), i.e. *Urera baccifera* (L.) Wedd. (Urticaceae). - *Pipturus arborescens* C.B. Robinson in Philip. J. Sci., Bot. 6: 13 (1911), *nom. superfl., illegit.* Type: cultivated in Berlin from material sent from Manila, Philippines (B, delet.).

Distribution : Ryukyus, Taiwan, Philippines, Borneo (*teste* Eichhorn MSS).

I am grateful to Henk den Bakker and Karl Eichhorn (L) for help in clarifying the identities of these plants.

2. Rubus franchetianus Lévl. in Bull. Acad. Int. Géog. Bot. 20: 71 (1909); Focke in Bibl. Bot. 19(83): 16 (1914). - *R. fragarioides* Bertol. var. *adenophora* Franchet, Pl. Delavay.: 203 (1890); Lauener in Notes Roy. Bot. Gard. Edinb. 30: 272 (1970). Type: Yunnan, HoKin, 'Col de Koua-la-po', 3500m, 13 July 1886, *Delavay 2160* (P!, holo; P!, iso) - Rosaceae.

Rubus fragarioides Bertol. in Mem. Accad. Sci. Ist. Bologna 12: 236, t. 5 (1861) & Misc. Bot. 22: 16, t. 5 (1862), *nom. illegit.*, non *R. fragarioides* (Michaux) Dum. Cours., Bot. Cult., ed. 2, 7: 293 (1814), i.e. *Waldsteinia fragarioides* (Michaux) Tratt. (Rosaceae) - *R. arcticus* L. var. *fragarioides* Focke, Bibl. Bot. 17 (72): 24 (1910). Type: Sikkim, '11-12000 ped.', *J.D. Hooker s.n.* in Herb. Hooker & Thomson (holo-, BOLO, n.v.; BM!, E, K!, L!, P!).

Rubus fragarioides Bertol. var. *pubescens* Franchet, Pl. Delavay.: 203 (1890). Type: Yunnan, 'les bois de Fang-yang-tchang', 19 July 1887, *Delavay s.n.* (P!, holo; P!, iso).

Distribution: Nepal to Bhutan, S Tibet, N Burma, W China.

I am grateful to Henry Noltie (E) for help here with literature pertinent to the flora of Bhutan.

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Appendix : Validly published binomials in neither *Australian Plant Name Index* nor *Index kewensis*

Abies dammara (Lamb.) Dum. Cours., Bot. Cult. ed. 2, 6: 474 (1811), based on *Pinus dammara* Lamb., = *Agathis dammara* (Lamb.) Rich. (Araucariaceae)

Agriphyllum fruticosum (L.) Dum. Cours., Bot. Cult. 2 : 519 (1801) & ed. 2 , 4: 264, 627 (1811), based on *Gorteria fruticosa* L., = *Berkheya fruticosa* (L.) Ehrh. (Compositae)

Ailanthus sinensis Dum. Cours., Bot. Cult., ed. 2, 6: 227 (1811), nom. superfl. pro *A. glandulosa* Desf., = *A. altissima* (Mill.) Swingle (Simaroubaceae)

Broussonetia tinctoria (L.) Dum. Cours., Bot. Cult. 3 : 686 (1802) & ed. 2, 6: 367 (1811), based on *Morus tinctoria* L., = *Maclura tinctoria* (L.) Steud. (Moraceae)

Bunium semicompositum Dum. Cours., Bot. Cult., ed. 2, 4: 409 (1811), based on a plant from Spain, = ? (Umbelliferae)

Caprifolium americanum (Mill.) Dum. Cours., Bot. Cult. 2 : 577 (1801) & ed. 2, 4: 338 (1811), based on *Periclymenum americanum* Mill. = *Lonicera* x *americana* (Mill.) K. Koch (Caprifoliaceae)

Caprifolium implexum (Sol.) Dum. Cours., Bot. Cult., ed. 2, 7: 209 (1814), based on (& =) *Lonicera implexa* Sol.

Caprifolium japonicum (Thunb.) Dum. Cours., l.c. (1814), based on (& =) *L. japonica* Thunb.

Caragana halodendron (Pallas) Dum. Cours., Bot. Cult. 3 : 513 (1802) & ed. 2, 6: 144 (1811), based on *Robinia halodendron* Pallas, = *Halimodendron halodendron* (Pallas) Voss (Leguminosae)

Caragana pygmaea (L.) Dum. Cours., Bot. Cult., ed. 2, 6: 144 ('pigmaea' 1811), based on *Robinia pygmaea* L. (Leguminosae)

Ceanothus glaber Dum. Cours., op.cit. 6: 268 (1811), nom. superfl. pro *C. microphyllus* Michaux (Rhamnaceae); non Spach (1834=?), nec Trelease (1897, i.e. *C.* x *lorenzenii* (Jepson) McMinn). Note: Spach's plant has always been obscure so it is good to see the name disappear as illegitimate.

Cotyledon hybrida Hort. Paris. ex Dum. Cours., Bot. Cult. 5: 416 (1805) & ed. 2, 5: 277 (1811), based on *Kalanchoe spathulata* DC. = *K. laciniata* (L.) DC. (Crassulaceae)

Coutarea portlandia Dum. Cours., Bot. Cult. 2: 561 (1801) & ed. 2, 4: 317 (1811), nom. superfl. pro *Portlandia hexandra* Jacq. = *C. hexandra* (Jacq.) K. Schum. (Rubiaceae)

Crotalaria oxalidifolia (Sims) Dum. Cours., Bot. Cult., ed. 2, 7: 314 (1814), based on *Loddigesia oxalidifolia* Sims, = *Hypocalyptus oxalidifolius* (Sims) Baill. (Leguminosae)

Diosma gracilis Dum. Cours., op. cit. 5: 216 (1811), based on a plant cultivated at Malmaison as *D. imbricata*, = *Adenandra* sp. (Rutaceae) ?

Diosma praecox Dum. Cours., op. cit. 5: 211 (1811), based on a plant cultivated at Courset, = Rutacea?

Duhamelia coccinea (Aubl.) Dum. Cours., op. cit. 4: 328 (1811), based on *Guettarda coccinea* Aubl., = *Isertia coccinea* (Aubl.) J. Gmelin (Rubiaceae)

Genista ferox (Poir.) Dum. Cours., Bot. Cult. 3 : 458 (1802) & ed. 2, 6: 68 (1811), based on *Spartium ferox* Poir. (Leguminosae)

Geranium lineatum Dum. Cours., Bot. Cult. ed. 2, 5: 18 (1811), based on a plant cultivated at Courset, = *Pelargonium* sp. (Geraniaceae)

Geranium modestum Dum. Cours., op. cit. 5: 29 (1811), based on a plant cultivated at Courset, = *Pelargonium* sp.

Geranium mucronatum Dum. Cours., Bot. Cult. 5 : 377 (1805) & ed. 2, 5: 25 (1811), based on a plant from the Cape, = *Pelargonium* sp.

Geranium pygmaeum Dum. Cours., Bot. Cult. ed. 2, 5: 35 ('pigmaeum', 1811), based on a plant cultivated at Courset, = *Pelargonium* sp.

Geranium rigidum (Willd.) Dum. Cours., op.cit. 5: 30 (1811), based on (& =) *Pelargonium rigidum* Willd.

Geranium squarrosum Dum. Cours., Bot. Cult. 5 : 379 (1805) & ed. 2, 5: 14 (1811), based on a Cape plant, = *Pelargonium* sp.

Gomphrena fruticosa Hort. Paris. ex Dum. Cours., Bot. Cult. 1: 645 (1802), ed. 2, 2: 488 (1811) = *Alternanthera porrigens* (Jacq.) Kuntze (Amaranthaceae)

Helianthemum anglicum Dum. Cours., Bot. Cult. 3 : 128 (1802) & ed. 2, 5: 182 (1811), based on a plant from England,= *H. appeninum* (L.) Mill. (Cistaceae)

Helianthemum myrtifolium Dum. Cours., Bot. Cult. 3 : 127 (1802) & ed. 2, 5 : 182 (1811), nom. superfl. pro *Cistus canus* L., = *H. oelandicum* (L.) Dum.-Cours. (Cistaceae)

Hibiscus aristatus (Cav.) Dum. Cours., Bot. Cult. 3 : 62 (1802) & ed. 2, 5: 92 ('aristata', 1811), based on (& =) *Pavonia aristata* Cav. (Malvaceae)

Hibiscus cuneifolius (Cav.) Dum. Cours., Bot. Cult. 3 : 61 (1802) & ed. 2, 5: 91 (1811), based on (& =) *Pavonia cuneifolia* Cav. (Malvaceae)

Linaria speciosa Hort. Angl. ex Dum. Cours., op.cit., ed. 2, 7: 142 (1814), based on a plant from Egypt = *L.* sp., ? non Jacq.f. (1816) = *L. bipartita* (Vent.) Willd. (Scrophulariaceae)

Lupinus fruticans Dum. Cours., op. cit. 6: 90 (1811), nom. superfl. pro *L. arboreus* Sims (Leguminosae)

Mespilus sanguinea (Pallas) Dum. Cours., op. cit. 5: 452 (1811), based on (& =) *Crataegus sanguinea* Pallas (Rosaceae)

Oenothera candida Dum. Cours., op. cit. 5: 361 (1811), nom. superfl. pro *O. tetraptera* Cav. (Onagraceae)

Pelargonium nobile Hort. Angl. ex Dum. Cours., op. cit. 7: 360 (1814), based on a plant cultivated at Courset, = *P.* sp. (Geraniaceae)

Pinus romaniae Dum. Cours. op. cit. 6: 459 (1811), based on a plant from the 'Levant', = *P. nigra* J.F. Arnold ssp. *pallasiana* (Lamb.) Holmboe (Pinaceae)

Rubus fragarioides (Michaux) Dum. Cours., op. cit. 7: 293 (1814), based on *Dalibarda fragarioides* Michaux, = *Waldsteinia fragarioides* (Michaux) Tratt. (Rosaceae). See above

Sapindus paniculata (Laxm.) Dum. Cours., Bot. Cult. 2: 769 (1802) & ed. 2, 4: 550 (1811), based on (& =) *Koelreuteria paniculata* Laxm. (Sapindaceae)

Sapium sebiferum (L.) Dum. Cours., Bot. Cult. 3 : 651 (1802) & ed. 2, 6: 326 (1811, Euphorbiaceae), based *on Croton sebiferum* L., = *Triadica sebifera* (L.) Small (Euphorbiaceae)

Serissa buxifolia Dum. Cours., Bot. Cult., ed. 2, 4: 331 nom. superfl. pro *Lycium japonicum* Thunb., = *S. japonica* (Thunb.) Thunb. (Rubiaceae)

Serratula odoratissima (Willd.) Dum. Cours., op. cit. 4: 625 (1811) = *Trilisa odoratissima* (Willd.) Cass. (Compositae)

Terebinthus atlanticus (Desf.) Dum. Cours., Bot. Cult. 3 : 575 (1802) & ed. 2, 6: 222 (1811), based on (& =) *Pistacia atlantica* Desf. (Anacardiaceae)

Terebinthus pistacia Dum. Cours., ll.cc., nom. superfl. pro *P. trifolia* L., = *P. vera* L.

Terebinthus vulgaris Dum. Cours., op. cit. 6: 222 (1811), based on (& =) *P. terebinthus* L.

Trichilia palustris [Thouin ex] Dum. Cours., Bot. Cult. 2: 813 (1802) & ed. 2, 4: 609 (1811) = ? Meliacea

Urtica arborescens Dum. Cours., Bot. Cult. 3 : 689 (1802) & ed. 2, 6: 370 (1811) = *Urera baccifera* (L.) Wedd. (Urticaceae). See above.

Xylosteum flexuosum (Thunb.) Dum. Cours., Bot. Cult., ed. 2, 7: 208 ('Xylosteon', 1814), based on *Lonicera flexuosa* Thunb., = *Lonicera japonica* Thunb. (Caprifoliaceae)